

Reconsideration of the above-identified application is respectfully requested in view of the following remarks.

REMARKS

Corrected drawings have been filed. The abstract and specification have been amended at the behest of the Examiner to correct awkward language and informalities. It is requested that the incorporation of Roman numerals next to the structural formulas in the specification be held in abeyance until the application is allowed.

Status of the Claims

Claims 1-10 are pending and have been rejected.

New claims 11 and 12 have been added.

Claim 1 has been amended at the behest of the Examiner to correct awkward language. A portion of original claim 2, "azo compounds" has been incorporated into claim 1. Claim 1 has also been amended to recite the solvent resistance of the film as stated at page 6, lines 1-2 of the specification.

Claim 2 has been amended. Support for the amended claim can be found in the specification at page 22, Lines 19-20.

Claim 3, 4, and 5 have been amended to correct claim dependency and to insert the Roman numerals next to the structural formulas.

Claim 8 has been amended to provide antecedent support for all terms at the behest of the Examiner. Support for the additional material can be found in the specification at page 23, Lines 1-5.

Claims 11 and 12 are added. Support for the new claims can be found in the specification at page 24, Lines 14-3, page 30, Inventive Example 1, and page 25, Line 1-5.

No new matter has been added.

Objection to Oath/Declaration under 37 CFR 1.67(a)

The Examiner objected to the oath/declaration under 37 CFR 1.67(a) as being defective. According to the Examiner, “Applicants identify PCT/US2004/025436 as an application to which they are claiming foreign priority under 35 U.S.C. 119; however this appears to be incorrect as that international application is the parent application to which this US application claims benefit as a national stage entry under 35 U.S.C. 371...notation of PCT/US2004/025436 as a ‘foreign priority document’ appears to be both redundant and improper”, See Office Action page 2, third paragraph. Applicants respectfully traverse this objection.

According to MPEP (Eighth Edition August 2001), 1893.03(c): “A U.S. national stage application may be entitled to: (A) a right of priority under 35 U.S.C. 119(a) and 365(b) based on a prior foreign application or international application designating at least one country other than the United States; and (B) the benefit of an earlier filed U.S. national application or international application designating the United States pursuant to 35 U.S.C. 119(e) or 35 U.S.C. 120 and 365(c)”. Although Applicants understand the Examiner’s reasoning for this objection, Applicants believe that according to MPEP 1893.03(c), Applicants are entitled to claim foreign priority to PCT/US2004/025436. Reconsideration and withdrawal of this objection is respectfully requested.

Rejections under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 1-10 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

According to the Examiner, “With regard to claim 1, the term ‘substantially parallel’ in claim 1 is a relative term which renders the claim indefinite” See Office Action at page 5, third paragraph. Although the Examiner acknowledged that Applicants have defined the term “substantially parallel” in the specification, the Examiner determined that the definition of the term “substantially parallel” also contains relative terms, thus the Examiner has decided to interpret any prior art laminate-type structure as having substantially parallel layers.

Applicants respectfully point out that the definition of “substantially parallel layers” in the specification on page 22, Lines 23-25 is “that adjacent layers remain generally in the x-y plane and have minimal or no z direction shift”. Applicants further assert that the definition is clear and concise, such that upon reading this definition one of ordinary skill of art would know that parallel layers in this application means adjacent layers remain in the same dimension (x-y plane) with minimal or no protrusions or corrugations occurring in the z direction (no z direction shift). Furthermore the Examiner did not explain what is relative in the Examiner’s view that renders the definition of “substantially parallel layers” unclear, thus Applicants believe this rejection is overcome.

The Examiner also stated that “The term ‘colored iridescent film’...is indefinite because the claims are not drawn to a film immersed in a solution of butyl acetate, and it is also unclear if this definition by Applicants is an accepted definition in the art” See Office Action page 6, first paragraph. The Examiner further decided to interpret the limitation “colored iridescent film” as any colored iridescent film.

Applicants respectfully point out that the definition of “colored iridescent film” on page 6, Lines 1-2 is “upon exposure to butyl acetate, the film remains colored and iridescent”. Nonetheless, in the interest of providing clarification

Applicants have amended claim 1 to reiterate that Applicants' colored iridescent film is resistant to butyl acetate (See amended claim 1). Therefore Applicants respectfully request the Examiner to ascertain Applicants' colored iridescent film claimed in claim 1-13 as being resistant to butyl acetate. As amended, Applicants believe this rejection is rendered moot.

The Examiner further stated that "Claim 8 recites the limitations 'said core outer layers' and 'said core inner layers' in the second and third lines of the claims...the claim is indefinite because claim 1 is open to any core comprising two layers, whereas it is unclear whether claim 8 can possess two layers and also possess inner layers and outer layers as claimed" See Office Action Page 6, second paragraph. The Applicants have herein amended claim 8 to incorporate the Examiner's suggested phrase. As amended, the Applicants believe the rejection of claim 8 has been overcome.

Rejections under 35 U.S.C. § 103

The Examiner has rejected claims 1-3, 6, 7, 9, and 10 under 35 U.S.C. §103(a) as being unpatentable over Onderkirk et al. (WO 99/36478) in view of Hays (5,669,967) as evidenced by Shetty et al. (5,837,359). Applicants respectfully traverse this rejection.

According to the Examiner, "...Onderkirk et al. and Hays are both drawn to plastic compositions; it would have been obvious to one having ordinary skill in the art at the time [of] the invention was made to combine in the azo pigment of Hays into the polymeric layers of the color shifting film of Onderkirk et al. The result of such combination would have been predictable ... each of the elements would have performed the same in combination as they had separately" See Office Action on page

7, fourth paragraph and page 8, first paragraph. The Examiner additionally stated that “... Hayes states that the pigments provide improved color strength, heat stability, and are useful as colorants in plastics...as evidence by Shetty et al., one of ordinary skill would understand that pigments can be incorporated in these multi-layered alternating polymeric iridescent films...” See Office Action Page 8, first paragraph.

Onderkirk et al. discloses glitter made of color shifting film that comprises alternating layers of at least first and second polymeric material (Page 2, Lines 28-30). Onderkirk et al. are silent on the use of organic pigment on the color shifting film, and the Examiner acknowledged this deficiency; see Office Action on page 7, second paragraph.

Hayes discloses an azo compound used as a pigment for a wide variety of materials such as ink, paint, lacquers, thermoplastic, rubber, and filaments such as viscose, and cellulose ether (Column 6, Lines 1-20).

Shetty discloses pearlescent pigments specifically consisted of mica platelets coated with an oxide, where the pigments are a part of a thermoplastic resinous multiplayer laminate film (Column 1, Lines 59-67 and Column 2, Lines 29-32).

The Applicants acknowledge that multi-layered color shift film or glitter are known, and that the azo compound disclosed by Hays is used as an organic pigment on plastic, or for that matter, many types of pigments can be applied onto many types of plastic. The Applicants, however, do disagree that it is obvious to combine Onderkirk et al. and Hays in view of Shetty to enable one of ordinary skill in the art to conceptualize Applicants’ invention.

Onderkirk et al. provides neither motivation nor mentioning of using organic pigment onto the film, and Hays’ organic azo pigment cites usage in the most general way; that the pigment can be used in wide variety of plastic. Hays’ does not disclose

usage of such pigment to form iridescent or color-shifting film, nor has Hays challenged the disclosed pigment to solvents such as butyl acetate. The mere mentioning by Hays of "color strength" and "heat stability" of his invention are not specific or direct towards solvent stability. Shetty discloses an entirely different pigment composition applied onto film, one that contains mica with additional coating. The Applicants' invention is related a colored iridescent film containing one or several synthetic azo compounds as organic pigments. The Applicants do not see how one of ordinary skill in the art would be motivated to combine such non-analogous art as Shetty with Hayes and Oudekirk et al. Nor does the combination suggest the solvent stability as claimed.

The Examiner stated that the elements cited in Hays and Oudekirk et al. would have performed the same in combination as they had separately. However, the Examiner has not provided Applicants with the reasons or the facts to have such a statement. Moreover, without looking to Applicants' specification there is simply no motivation to combine the specific elements claimed (organic pigment containing azo compounds with core of substantially parallel alternating polymeric layers) to derive the presently claimed colored iridescent film.

With regards to claim 6 and 7, the Examiner stated that "it would have been obvious to one having ordinary skill of art at the time the invention was made to combine the azo pigment of Hays into any of the alternating polymeric layers, including at least one inner layer or at least one outer layer as claimed, in order to adjust the luster and coloration of the color shifting film...for resulting glitter" See Office Action, page 8, third paragraph. The Applicants respectfully disagree with the Examiner.

Onderkirk et al. is silent on using organic pigment on a multi-layered film or glitter, and Hays' does not disclose usage of such pigment to form iridescent or color-shifting film, or for that matter, an outer layer or inner layer of any type of film. The Examiner also did not articulate how one of ordinary skill in the art, without looking into Applicants' specification, would know that such pigment could be used to adjust luster and coloration of a color shifting film to make glitter.

With regards to claims 9 and 10, the Examiner stated "Onderkirk et al. disclosed that the color shifting film may be made into glitter... glitter may be incorporated into fingernail polish", See Office Action Page 8, fourth paragraph and page 9, first paragraph. Again, the Applicants respectfully point out that Onderkirk et al. do not disclose glitter made from iridescent film that is resistant to butyl acetate or glitter containing any organic pigment, nor fingernail polish containing glitter made of iridescent film having an organic pigment.

The Applicants' invention is directed to solving the solvent instability caused by combining known commercial dyes with multi-layered polymeric film. It is not obvious in view of Onderkirk et al., Hayes and/or Shetty et al. alone or in combination how one of ordinary skill in the art would be motivated by these references to derive the Applicants' invention to solve this problem. Reconsideration and withdrawal of this rejection is respectfully requested.

The Examiner has rejected claims 1, 2, 4, 6, 7, 9, and 10 under 35 U.S.C. §103(a) as being unpatentable over Onderkirk et al. (WO 99/36478) in view of Hays (5,746,821) as evidenced by Shetty et al. (5,837,359). Applicants respectfully traverse this rejection.

The Applicants' position on the Examiner's rejection due to Onderkirk et al. in view of Hays (821) as evidenced by Shetty et al. is the same as Applicants' response

to the Examiner's rejection of claims 1-3, 6, 7, 9, and 10 under 35 U.S.C. §103(a) as being unpatentable over Onderkirk et al. in view of Hays (967) as evidenced by Shetty et al.. See page 12 through 15.

The Applicants' invention is related to a colored iridescent film containing one or several synthetic azo compounds as organic pigments without additional coating. Applicants do not see how one of ordinary skill in the art would be motivated by such non-analogous art as Shetty to combine Hayes and Onderkirk et al., nor does the combination suggest the result of solvent stability found. The Applicants respectfully request that the rejection be withdrawn.

The Examiner has rejected claims 1, 2, 5-7, 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over Onderkirk et al. (WO 99/36478) in view of Bindra (5,677,435) as evidenced by Shetty, et al. (5,837,359). Applicants respectfully traverse this rejection.

The Applicants' position on the Examiner's rejection due to Onderkirk et al. in view of Bindra as evidenced by Shetty et al. is the same as Applicants' response to the Examiner's rejection of claims 1-3, 6, 7, 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over Onderkirk et al. in view of Hays (967) as evidenced by Shetty et al. See page 12 through 16. Bindra does not disclose adding the azo pigment into iridescent films as claimed, nor does the reference suggest the resultant solvent stability found by Applicants. The Applicants respectfully request the rejection to be withdrawn.

The Examiner has rejected claim 8 under 35 U.S.C. 103(a) as being unpatentable over Onderkirk et al. (WO 99/36478) in view of Hays (5,669,967) as evidenced by Shetty et al. (5,837,359), and further in the view of Shetty et al. (5,451,449). Applicants respectfully traverse this rejection.

The Examiner stated, “Onderkirk et al. in view of Hays as evidenced by Shetty et al. ‘359 render obvious all of the limitations of Applicants’ claim 1...Shetty et al. ‘449 disclose that it is known in multilayered iridescent films comprising alternating polymeric material layer to be thicker than inner layer...” See Office Action, section 11. The Applicants respectfully disagree with the Examiner.

Again, the Applicants have stated that the combination of Onderkirk, Hays and Shetty et al. ‘359 cannot render Applicants’ claim 1 obvious, see page 12-16. Moreover, Shetty et al. ‘449 stated specifically that their invention does not incorporate pigment, as pigment is insoluble in their plastic material and gives poor results (Column 2, Lines 41-45 and Column 4, Lines 10-15). Therefore, the Applicants fail to see how the combination of Onderkirk et al., Hays, and Shetty et al. ‘449 enable one of ordinary skill in the art to make a butyl acetate-resistant, colored iridescent film core containing organic pigment with at least one outer layer thicker than at least one inner layer. Reconsideration and withdrawal of this rejection is respectfully requested.

The Applicants have stated that combination of Onderkirk, Hays (821) and Shetty et al. ‘359 cannot render Applicants’ claim 1 obvious, see page 12-16. The Applicants’ position on the Examiner’s rejection in further view of Shetty et al. ‘499 is the same as Applicants’ response to the Examiner’s rejection of claim 8 under 35 U.S.C. §103(a) as being unpatentable over Onderkirk et al. (WO 99/36478) in view of Hays (5,669,967) as evidenced by Shetty et al. (5,837,359), and further in the view of Shetty et al. (5,451,449), See page 16-17. Reconsideration and withdrawal of this rejection is respectfully requested.

The Examiner has rejected claim 8 under 35 U.S.C. 103(a) as being unpatentable over Onderkirk et al. (WO 99/36478) in view of Bindra (5,677,435) as

evidenced by Shetty et al. (5,837,359), and further in the view of Shetty et al. (5,451,449). Applicants respectfully traverse this rejection.

The Applicants have stated that combination of Onderkirk, Bindra, and Shetty et al. '359 cannot render Applicants' claim 1 obvious, see page 12-16. The Applicants' position on the Examiner's rejection in further view of Shetty et al. '499 is the same as Applicants' response to the Examiner's rejection of claim 8 under 35 U.S.C. §103(a) as being unpatentable over Onderkirk et al. (WO 99/36478) in view of Hays (5,669,967) as evidenced by Shetty et al. (5,837,359), and further in the view of Shetty et al. (5,451,449), See page 16-17. Reconsideration and withdrawal of this rejection are respectfully requested.

Respectfully submitted,

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Date

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